

Amendments to the Claims: This listing of claims will replace all prior versions, and listings, of claims in the application

Listing of Claims:

1. (Currently Amended) Electromechanical valve actuator for internal combustion engines, equipped with a polarized electromagnet (700) and with a mobile magnetic plate (706) switching between a first position close to the electromagnet (700) and a second position remote from the electromagnet (700), the switching times between these positions being determined depending on the operating state of the engine, ~~characterized in that it comprises~~ comprising said means (704, 708) for supplying the electromagnet (700) with a variable attracting current in the course of the approach of the plate (706) to the electromagnet (700).
2. (Currently Amended) Actuator in accordance with claim 1, ~~characterized in that it comprises~~ wherein the means for supplying the electromagnet with a variable attracting current includes means for reducing the attracting current as the plate (706) is approaching.
3. (Currently Amended) Actuator in accordance with claim 1 or 2, ~~characterized in that it comprises~~ wherein the means for supplying the electromagnet with a variable attracting current including means for inverting the direction of the current (i_b , i_h) supplying the electromagnet (700) when the plate (706) switches to the second position.
4. (Currently Amended) Actuator in accordance with claim 3, ~~characterized in that it comprises~~ wherein the means for supplying the electromagnet with a variable attracting current including means for controlling a current (i_b , i_h) generating a magnetic field of an intensity lower than or equal to the intensity of the magnetic field generated by a magnet (704) of the electromagnet when the current is inverted.
5. (Currently Amended) Actuator in accordance with ~~one of the above~~ claim[[s]] 1 or 2, ~~characterized in that~~ wherein the plate (706) moves into the vicinity of a second electromagnet in its second position and [[it]] the actuator further comprises means for simultaneously controlling the current supplies for [[each]] the first electromagnet and the second electromagnet.

6. (Currently Amended) Actuator in accordance with ~~one of the above~~ claim[[s]] 1 or 2, ~~characterized in that it comprises a wherein the~~ electromagnet (700) is equipped with an E-shaped support having these branches, and includes a magnet (704) ~~[[being]]~~ located at the end of one of the branches of the support opposite in relation to the plate ~~(706)~~.

7. (Currently Amended) Actuator in accordance with ~~one of the above~~ claim[[s]] 1 or 2, ~~characterized in that~~ wherein the variations in the current are related to one of an amplitude and/or to a duration of supply of the current.

8. (Currently Amended) Actuator in accordance with ~~one of the above~~ claim[[s]] 1 or 2, ~~characterized in that it comprises~~ further comprising means for ~~considering~~ adjusting the variable attracting current responsive to the speed of the engine to be a parameter of the operating state of the engine.

9. (Currently Amended) Internal combustion engine equipped with an actuator comprising a polarized electromagnet and a magnetic plate switching between a first position close to the electromagnet and a second position, characterized in that the actuator is according to ~~one of the claim[[s]] 1 through 9~~ or 2.